**Amendments to the specification:**

*Rewrite the paragraph bridging pages 27 and 28:*

Figure 2 and Figure 3 illustrate the verification of the differential expression of the human TARPP (hTARPP) gene in AD brain tissues by quantitative RT-PCR analysis. Quantification of RT-PCR products from RNA samples collected from the frontal cortex (F) and the temporal cortex (T) of AD patients (Figure ~~2a~~ 2A) and samples from the frontal cortex (F) and the hippocampus (H) of AD patients (Figure ~~3a~~ 3A) was performed by the LightCycler rapid thermal cycling technique. Likewise, samples of healthy, age-matched control individuals were compared (Figure ~~2b~~ 2B for frontal cortex and temporal cortex, Figure ~~3b~~ 3B for frontal cortex and hippocampus). The data were normalized to the combined average values of a set of standard genes which showed no significant differences in their gene expression levels. Said set of standard genes consisted of genes for cyclophilin B, the ribosomal protein S9, the transferrin receptor, GAPDH, and beta-actin. The figure depicts the kinetics of amplification by plotting the cycle number against the amount of amplified material as measured by its fluorescence. Note that the amplification kinetics of hTARPP cDNAs from both, the frontal and temporal cortices of a normal control individual, and from the frontal cortex and hippocampus of a normal control individual, respectively, during the exponential phase of the reaction are juxtaposed (Figures ~~2b~~ 2B and ~~3b~~ 3B, arrowheads), whereas in Alzheimer's disease (Figures ~~2a~~ 2A and ~~3a~~ 3A, arrowheads) there is a significant separation of the corresponding curves,

indicating a differential expression of the human TARPP gene in the respective analyzed brain regions.

*Rewrite page 28, 3rd complete paragraph:*

Figure 5 shows an alignment of the amino acid sequence of SEQ ID NO.1, hTARPP protein, with mouse (*Mus musculus*) TARPP amino acid sequence (GenBank accession number af324451) (SEQ ID NO: 17).

*Rewrite page 29, 1st complete paragraph:*

Figure 10 depicts human cerebral cortex labeled with an affinity-purified rabbit anti-hTARPP antiserum raised against a peptide corresponding to amino acids 566-580 (green signals). Strong immunoreactivity of human TARPP was detected in both, pre-central cortex (CT) and white matter (WM) (Figure ~~10a~~ 10A, low magnification). In the cortex, hTARPP is mainly detected in the cytoplasm of neuronal cell bodies and in some distal segments of neuronal processes (Figure ~~10ab~~10B, high magnification). Moreover, axonal filaments and the cytoplasm of some glia cells were immuno-positive in the white matter. The same immunostaining pattern was observed by using another antiserum raised against a peptide mapping to amino acids 325-341 of hTARPP. Blue signals indicate nuclei stained with DAPI.